Attorney's Docket 060258-0279256 Client Reference: 2980523US/VK/HER

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ੴre PATENT APPLICATION of:

Confirmation Number: 2170

AHTI MUHONEN ET AL.

Application No.: 09/830,816

Group Art Unit: 2682

Filed: April 27, 2001

Examiner: Dao, Minh D.

For: LOCATION SERVICES IN A PACKET RADIO NETWORK

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 RECEIVED

MAR 0 5 2004

Technology Center 2600

AMENDMENT/RESPONSE TRANSMITTAL

Transmitted herewith is an amendment/response for this application.

FEES

The fee for claims and extension of time (37 C.F.R. 1.16 and 1.17) has been calculated as shown below:

| | CLAIMS | | | | | | | | | | |
|---------------------------------------|--------------------------|------|----------|-------|---|----|--------|-----|-------|------|--|
| | REMAINING | HIGH | IEST NO. | | | | | | | | |
| | AFTER PREVIOUSLY PRESENT | | | | | | | | ADDIT | | |
| | AMENDMENT PAID FOR | | | EXTRA | | RA | RATE | | | FEE | |
| | | | | | | × | | ··· | | | |
| TOTAL | 16 | | 20 | = | 0 | \$ | 18.00 | = | \$ | 0.00 | |
| | | | • | | | X | | | | | |
| INDEP. | 2 | _ | 3 | = | 0 | \$ | 86.00 | = | \$ | 0.00 | |
| FIRST PRESENTATION OF MULTIPLE DEP. + | | | | | | | | | | | |
| CLAIM | | | | | - | \$ | 290.00 | = | \$ | 0.00 | |
| | | | | | | | | | | | |
| TOTAL ADDITIONAL CLAIM FEE | | | | | | | | | \$ | 0.00 | |
| GRAND TOTAL | | | | | | | | | \$ | 0.00 | |

FEE PAYMENT

Authorization is hereby made to charge the amount of \$0.00 to Deposit Account No. 033975. Charge any additional fees required by this paper or credit any overpayment in the manner authorized above. A duplicate of this paper is attached.

Date: March 4, 2004

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Reg. No. 41844

Attorney Docket: 060258-0279256 Client Reference: 2980523US/VK/HER

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of: MUHONEN

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Title: LOCATION SERVICES IN A PACKET RADIO NETWORK

RESPONSE

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Sir:

In response to the Office Action dated December 22, 2003, please reconsider the patentability of the pending claims based on the following remarks. Although the Office Action acknowledged that claims 4 and 5 include allowable subject matter and would be allowable if rewritten in independent format, Applicants delay rewriting the claims at this time to afford the Office the opportunity to fully reconsider the patentability of the rejected base claims based on the arguments presented herein.

The Office Action rejected claims 1-3, 6-8 and 14-16 under 35 U.S.C. 102 as being anticipated by Silver et al. (U.S. Pat. 6,560,457; hereafter "Silver") and claims 9-13 under 35 U.S.C. 103 as being unpatentable over Silver in view of Billstrom et al. (U.S. Pat. 5,590,133; hereafter "Billstrom"). Applicants traverse the prior art rejections because Silver, analyzed individually or in combination with Billstrom, fails to teach or suggest all the features recited in the rejected claims.

For example, the combined teachings of the cited prior art references fail to teach or suggest a method for providing location service information related to a mobile station in a mobile communications system supporting connections of a first type and a second type, the method comprising "retrieving the location service information related to the mobile station. . . wherein the retrieving further comprises: determining a preferred type of connection for the retrieving based on the first set of predetermined criteria. . . ," as recited in independent

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claim 1 and its dependent claims 2-15. Similarly, the combined teachings of the cited prior art references fail to teach or suggest an arrangement for supporting location service information related to a mobile station in a mobile communications system supporting circuit-switched communications and packet-switched communications, the arrangement being configured to "retrieve the location service information related to the mobile station; and . . . determine a preferred type of connection for the retrieving on the basis of a first set of predetermined criteria. . .," as recited in independent claim 16.

Contrary to the assertions of the Office Action, these features are not disclosed, taught or suggested by Silver. As indicated in the text of Applicants' specification, there is a clear distinction between the term "location management", which is necessary for call routing, and "location services", which provide value-added services; see, for example, the paragraph beginning on page 1, line 35:

Within the context of this application, the following conventions will be used. 'Location management' refers to the task of tracking the location of a mobile station in terms of location/routing areas and cell/network element identifiers. Thus, location management is performed in any mobile communications system, and it is a necessary task for routing calls to a mobile subscriber. In contrast, 'location service' (LCS) refers to the task of tracking the location of a mobile station in terms of geographical coordinates. This task is not necessary for routing calls. Rather, it is a value-added service, or it can be used for producing value-added services.

While Silver refers to location services, the passage cited by the Office Action actually relates to location management, not location services; specifically, column 5, lines 21-31 merely discloses how an incoming call to MT 130 is set up through the circuit-switched network 110 by signalling over both the DCCH and PCCH channels of the wireless links 132 and 134. Thus, Silver merely relates to location management while the claimed invention relates to location service information.

Further, even assuming for argument's sake that the teachings of the passage at column 5, lines 21-31 could be applied to location services, that passage fails to disclose, teach or suggest determination of a preferred type of connection for the retrieval of location service information related to a mobile station based on a first set of predetermined criteria, as recited in independent claims 1 and 16 and their respective dependent claims. Rather, Silver merely discloses a circuit-switched network 110 which is a fixed connection. Therefore, since there is only one fixed connection, there is nothing which could be

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considered to be a "non-preferred type" of connection; this is why Silver does not disclose, teach or suggest any motivation to determine a preferred type of connection.

Billstrom fails to remedy these deficiencies of Silver because Billstrom merely teaches particulars on Packet Data Protocol contexts. Therefore, the combined teachings of Silver and Billstrom fail to teach or suggest the claimed invention including determination of a preferred type of connection for the retrieval of location service information related to a mobile station based on a first set of predetermined criteria.

Therefore, claims 1-16 are allowable.

All objections and rejections having been addressed, Applicants respectfully request immediate issuance of a Notice of Allowance indicating allowance of all pending claims. In the event that further action is necessary, Applicants request that the Examiner contact the undersigned attorney via telephone.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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